

## ABSTRACT

The present invention relates to novel methods and devices for detecting whole or non-fragmented parathyroid hormone (wPTH) in a biological sample. In particular, a novel monoclonal or polyclonal antibody or antibody fragment is used that is specific for a portion of the initial peptide sequence for wPTH which comprises a domain for adenylate cyclase activation, (amino acids 2 to 8), wherein at least four amino acids in this sequence are part of the reactive portion with the antibody. The present wPTH assay can differentiate between the complete 1 to 84 amino acid sequence form of PTH and a large but incomplete 7 to 84 amino acid sequence form of PTH that is measured by commercially available "intact" or I-PTH assays. Measurement of both the complete biologically active form of PTH and the large but biologically inactive form of PTH can lead to the misdiagnosis of the parathyroid function in patients.